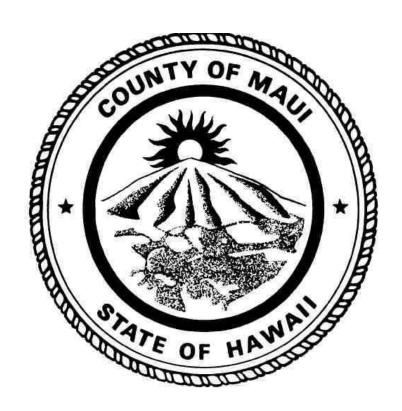
## <u>Proposed Budget • Fiscal Year 2007</u>

CAPITAL IMPROVEMENT

# West Maui



TOTAL
40,000 B
800 C
7,500 B
26,400 F
3,100 B
6,700 C
2,500 C
75 P
900 P
45 C
250 P
500 B
2,000 F
1,500 C
10 C
4,400 B
7,200 F
175 C
2,800 C
75 B
250 C
150 B
1,000 C
1,500 X
100 C
1,200 X
250 C
1,750 X

Fund Source: C=County B = G.O. Bond L = Lapsed Bond P = Park Assessment R = Water Restricted U = Water Unrestricted X = Other F = Federal S = State Fund

			(	\$ in 1,000's)	
		Prior <u>Appropriation</u>	FY 2007	FY 2008 – 2012	TOTAL
Sewer (Continued)					
	Lahaina WWPS #1 Replacement	100 C	350 C		450 C
			7,050 X		7,050 X
	Lahaina WWPS #2 Modifications			1,800 X	1,800 X
	Lahaina WWPS #3 Force Main Extension			1,200 X	1,200 X
	Lahaina WWPS #3 Force Main Extensions and Lahaina WWPS#2				
	Modification			650 B	650 B
	Lahaina WWRF Modifications, Stage IA	1,000 B	2,500 B		3,500 B
				20,000 X	20,000 X
	Wahikuli Gravity Sewer			350 C	350 C
				4,000 B	4,000 B
	West Maui Reuse System Storage and Transmission			1,200 C	1,200 C
				24,000 X	24,000 X
Water Supply	Lahaina WTP Improvements - PVDF Retrofit		100 U		100 U
	Mahinahina Treatment Plant Improvements		710 R		710 R
	The second secon			10,000 X	10,000 X
	Treatment for Honokahua Well A Design		250 R	2,000 R	2,250 R
	Total West Maui	9,845	28,410	152,135	190,390
			Fund	ling Source	
		1,545 C	4,650 C	11,935 C	18,130 C
		3,100 B	5,625 B	55,150 B	63,875 B
		L	L	L	L
		P	1,225 P	P	1,225 P
		R	960 R	2,000 R	2,960 R
		Ü	100 U	2,000 K	100 U
		X	8,550 X	59,950 X	68,500 X
		5,200 F	7,300 F	23,100 F	35,600 F
		5,200 T	7,300 T	25,100 T S	33,000 T
		O	O	9	J

Fund Source: C=County B = G.O. Bond L = Lapsed Bond P = Park Assessment R = Water Restricted U = Water Unrestricted X = Other F = Federal S = State Fund

## **Lahaina Town Drainage Improvements**

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

Project Type Drainage

**Description and** Incremental drainage improvements in Lahaina town per Drainage Master Plan to alleviate storm damage.

Justification

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS IN	N THOUSANDS_			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition			300 B	300 B	300 B	300 B	300 B	1,500 B
Design			700 B	700 B	700 B	700 B	700 B	3,500 B
Construction					15,000 B	10,000 B	10,000 B	35,000 B
Other								
Total Cost Funding Source	0	0	1,000 1,000 B	1,000 1,000 B	16,000 16,000 B	11,000 11,000 B	11,000 11,000 B	40,000 40,000 B

#### **Lahaina Watershed Flood Control**

District West Maui

Department Public Works and Environmental Management - Engineering

**Project Type** Drainage

Incremental drainage improvements in the Lahaina Watershed Flood Control Project. County is responsible for land rights, utility relocation, **Description and Justification** 

and road crossings. Natural Resources Conservation Service (NRCS) funding for channel basin work.

**Operating Impact** Impact on staffing or operating budget anticipated at \$50,000 per year.

				DOLLARS IN	N THOUSANDS_			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition		500 B	400 B	400 B	400 B			1,700 B
Design		300 B	300 B	300 B	300 B			1,200 B
Construction	800 B	800 B	800 B	800 B				3,200 B
					800 C			800 C
	5,000 F	5,000 F	5,000 F	5,000 F	5,000 F			25,000 F
Other								
Const Mgmt	200 B	300 B	300 B	300 B	300 B			1,400 E
Const Mgmt	200 F	300 F	300 F	300 F	300 F			1,400 F
<b>Total Cost</b>	6,200	7,200	7,100	7,100	7,100	0	0	34,700
Funding Source					800 C			800 (
	1,000 B	1,900 B	1,800 B	1,800 B	1,000 B			7,500 E
	5,200 F	5,300 F	5,300 F	5,300 F	5,300 F			26,400 F

#### **Lahaina Baseyard Improvements**

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

**Project Type** Government Facilities

**Description and**Justification

Design and construct a new office building, buy adjacent property, construct a garage for truck and equipment storage, install flood lights, and install fuel monitoring system. This upgrade is necessary for better working conditions, to protect equipment and increase efficiency.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS IN	N THOUSANDS_			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition				300 B				300 B
Design				300 B				300 B
Construction					2,500 B			2,500 B
Other								
Total Cost	0	0	0	600	2,500	0	0	3,100
Funding Source				600 B	2,500 B			3,100 B

#### **Olowalu Fire Station**

**District** West Maui

**Department** Fire & Public Safety

**Project Type** Government Facilities

Description and Justification

Design and construct a new fire station complex in the Olowalu district of Lahaina. Fire protection is currently provided by the Lahaina Fire Station. The response time to the Olowalu district has increased and is inadequate. The new complex should be designed to meet the needs

of the projected growth for the district. \$700,000 represents the cost of a new fire apparatus.

Operating Impact Operating impact will include staffing and operational needs. Fifteen additional personnel will increase the salaries and wages by

approximately \$800,000. Operations expenses will increase by approximately \$50,000.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition						700 C		700 C
Design						300 C		300 C
Construction							5,000 C	5,000 C
Other								
Fire Apparatus							700 C	700 C
Total Cost	0	0	0	0	0	1,000	5,700	6,700
Funding Source	<u> </u>					1,000 C	5,700 C	6,700 C

#### **Boys and Girls Clubs of Maui – Lahaina Unit**

**District** West Maui

**Department** Parks & Recreation

Project Type Parks & Recreation

Description and Justification

The renovation and expansion of the existing West Maui Youth Center facility will include renovation of the restrooms and expansion of the floor area from 3,000 sq. ft. to over 6,000 sq. ft. to accommodate game rooms, tech, fitness and teen centers. The renovated and expanded facility will meet the needs of today's youth between the ages of 9-17 in the West Maui area (approximately 4,000 in this district). The design

of the renovation and expansion, funded by Community Development Block Grants, is complete.

**Operating Impact** Increase in operating, maintenance and utility costs.

	-			DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design								0
Construction		2,500 C						2,500 C
Other								
Total Cost	0	2,500	0	0	0	0	0	2,500
<b>Funding Source</b>		2,500 C						2,500 C

## **Lahaina Aquatic Center Filter Replacement**

**District** West Maui

**Department** Parks and Recreation

Project Type Parks and Recreation

**Description and** Replacing existing rusted cast-iron sand filter with fiberglass filters. Filters are rusting; sand cannot be changed out, causing a potential

**Justification** health hazard. Pool water quality will improve meeting Department of Health standards.

**Operating Impact** No impact on staffing or operating budget anticipated.

		DOLLARS IN THOUSANDS								
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL		
Land Acquisition								0		
Design								0		
Construction		75 P						75 P		
Other										
Total Cost	0	75	0	0	0	0	0	75		
Funding Source		75 P						75 P		

#### **Lahaina Civic Center Improvements**

**District** West Maui

**Department** Parks and Recreation

Project Type Parks and Recreation

Description and Justification

The project involves various improvements to the Civic Center including construction funding for the tennis court lights, installation of an automated retractable bleacher on the west end of the gymnasium, connection of the irrigation system to the existing irrigation well, design

and construction of a restroom for the amphitheater. Design of the tennis court lighting is under way.

**Operating Impact** No impact on staffing or operating budget anticipated. Net savings from use of well water for irrigation.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design		70 P						70 P
Construction		830 P						830 P
Other								
Total Cost	0	900	0	0	0	0	0	900
Funding Source		900 P			•	•		900 P

## Napili Park Playground

**District** West Maui

**Department** Parks and Recreation

Project Type Parks and Recreation

**Description and** Funding for construction of a playground. **Justification** 

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition								0
Design	45 C							45 C
Construction		250 P						250 P
Other								
Total Cost	45	250	0	0	0	0	0	295
Funding Source	45 C							45 C
		250 P						250 P

#### **Keawe Street Extension**

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

Project Type Road Improvements

**Description and** Construction and land acquisition for the extension of Keawe Street to Lahaina Bypass. Keawe Street is necessary to provide access to the

Justification Lahaina Bypass.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition		500 C						500 C
Design	500 B							500 B
Construction		500 C						500 C
		2,000 F						2,000 F
Other								
Const Mgmt		500 C						500 (
<b>Total Cost</b>	500	3,500	0	0	0	0	0	4,000
Funding Source	500 B							500 I
		2,000 F						2,000
		1,500 C						1,500 (

## **Lahaina Town Historic District Street Signage Repairs**

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

Project Type Road Improvements

**Description and**Replace damaged and missing wooden signs within the Lahaina Town Historic District.
Justification

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition								0
Design								0
Construction			10 C					10 C
Other								
Total Cost	0	0	10	0	0	0	0	10
Funding Source			10 C					10 C

## **Lower Honoapiilani Road Improvements**

West Maui District

Public Works and Environmental Management - Engineering Department

**Project Type** Road Improvements

**Description and** Incremental road improvements along Lower Honoapiilani Road. Improvements include road reconstruction, curb, sidewalk, drainage and **Justification** 

road widening (land acquisition), for safety of pedestrians and vehicles.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition		1,000 B						1,000 B
Design	600 B							600 B
Construction			1,800 B					1,800 B
Other			7,200 F					7,200 F
Const Mgmt			1,000 B					1,000 B
Total Cost	600	1,000	10,000	0	0	0	0	11,600
Funding Source	600 B	1,000 B	2,800 B					4,400 B
			7,200 F					7,200 F

## Shaw Street Sidewalk, Wainee Street to Honoapiilani Highway

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

Project Type Road Improvements

**Description and**Justification
Continuation of Shaw Street Sidewalk project between Wainee and Honoapiilani Highway. This project calls for the construction of a portion of sidewalk along Shaw Street with the ultimate goal of providing a continuous pedestrian route from Front Street to Honoapiilani Highway.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition			75 C					75 C
Design								0
Construction	50 C		50 C					100 C
Other								
Total Cost	50	0	125	0	0	0	0	175
Funding Source	50 C		125 C					175 C

## **West Maui District Road Resurfacing**

**District** West Maui

**Department** Public Works and Environmental Management - Engineering

Project Type Road Improvements

**Description and**Justification

District resurfacing will reduce annual maintenance costs and improve safety. In-house design.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS IN	THOUSANDS_			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design								0
Construction	1,000 C	300 C	300 C	300 C	300 C	300 C	300 C	2,800 C
Other								
Total Cost	1,000	300	300	300	300	300	300	2,800
Funding Source	1,000 C	300 C	300 C	300 C	300 C	300 C	300 C	2,800 C

#### **Lahaina Recycling Drop-box & Redemption Center**

**District** Lahaina

**Department** Public Works and Environmental Management - Solid Waste

Project Type Sanitation

Description and Justification The west side has been asking for a convenient place to take all recyclables for over 15 years. There is only one HI 5 Redemption Center to service the entire west side of Maui. This site is very small and not adequate to absorb the high volume of recyclables and HI5 containers generated on the west side. A larger facility is needed, similar to the MCC site in Kahului. The current Recycling and HI 5 Redemption Center on Keawe Street may be forced to close when the by-pass road is constructed. Planning for a new full service Recycling Drop-box and HI 5 Redemption Center is imperative. The Deposit Beverage Container Program will pay for half of this new Recycling Center, the County the other half. Total funding of \$150,000 will be needed for planning and design work.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	<u>FY 2011</u>	FY 2012	TOTAL
Land Acquisition		50 B						50 B
Design		25 B						25 B
Construction			250 C					250 C
Other								
Total Cost	0	75	250	0	0	0	0	325
Funding Source		75 B						75 B
			250 C					250 C

#### **Olowalu Convenience Center Resurfacing**

**District** West Maui

**Department** Public Works and Environmental Management - Solid Waste

Project Type Sanitation

Description and Justification

Olowalu Convenience Center serves West Maui residents as a transfer station for their refuse and as a recycling center for their recyclables. The Center opened in 1992 and its asphalt surface has deteriorated to the extent it requires removal and replacement. Contractors, to achieve compaction in the green waste and refuse bins, have used backhoes which have eroded the asphalt down to the red dirt, creating a pot-holed and unsafe surface for customer vehicles parking next to the bins. This condition will continue to worsen without this work. In addition, the pavement has scrapes, stains, oil slicks, and is in poor overall condition. Curbs are crumbling where vehicles have backed onto them. In FY05 Olowalu received 6,650 tons of residential solid waste and recyclables including 2,000 tons of green waste. The recycling rate has averaged around 50% over the years. The Center has a steady flow of customers throughout the day and is open seven days a week.

**Operating Impact** County operating costs will not increase due to these infrastructure improvements.

				DOLLARS	IN THOUSANDS_			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design								0
Construction	0	150 B	0	0	0	0	0	150 B
Other								
Total Cost	0	150	0	0	0	0	0	150
Funding Source		150 B						150 B

#### **EPA Consent Decree Sewer Rehabilitation**

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Rehabilitation of major gravity sewer lines that have reached the end of their useful life and/or have been found to be damaged or in disrepair via video investigation or other means. Damaged or deteriorated lines require greater maintenance and pose the threat of potential blockages or total failure which may cause wastewater spills, damage to property and the environment, and increased operational costs due

to callout of personnel. Spills would also entail fines established by the Consent Decree. Scheduling the repair or replacement of

deficiencies noted during recent evaluations is a requirement of the 1999 Consent Decree.

Lahaina Project #1: CIPP lining of existing 15", 21" and 30" RCP main trunk line in Kaanapali Parkway north of Kaanapali Pump Station

(~2,100 linear feet).

**Operating Impact** No impact on staffing or operating budget anticipated.

		DOLLARS IN THOUSANDS							
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>	
Land Acquisition								0	
Design								0	
Construction			500 C	500 C				1,000	
Other		1,500 X						1,500	
Total Cost	0	1,500	500	500	0	0	0	2,500	
Funding Source			500 C	500 C				1,000	
		1,500 X						1,500	

#### Front Street Sewer Line Rehabilitation

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification A significant volume of salt water from the ocean infiltrates into the sewer collection system along Front Street in Lahaina. As a result, high salinity levels in the reclaimed water from the Lahaina Wastewater Reclamation Facility make the water unusable for landscape and agricultural irrigation in many instances. The impact of not performing rehabilitation in these low lying areas is that reclaimed water quality will continue to deteriorate due to higher levels of chlorides. This in turn will limit the number of users willing to use the water and possibly lower the amount of water recycled. The County ultimately plans to expand its reclaimed water distribution system in West Maui but current salinity levels in the reclaimed water will cause major problems for potential customers.

FY2006 Scope: Hire a consultant to review/study the current situation and prepare a Project Engineering Report with recommendations on areas in need of repair and methods to accomplish rehabilitation.

FY2008 Scope: Prepare bid documents and hire a contractor to rehabilitate the gravity sewer lines in the area using trenchless technology (i.e., fiberglass pipe lining technique).

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**Operating Impact** No impact on staffing or operating budget anticipated.

		DOLLARS IN THOUSANDS							
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL	
Land Acquisition								0	
Design	100 C							100 (	
Construction			1,200 X					1,200	
Other									
Total Cost	100	0	1,200	0	0	0	0	1,300	
Funding Source	100 C							100	
			1,200 X					1,200	

#### Kaanapali/Hyatt Force Main Replacements

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification A 2004 corrosion study of County owned force mains identified the condition of each force main and estimated its remaining useful life. As a result of this study it was found necessary to replace these facilities within the next five years in order to avoid a costly failure of the lines and

a major disruption to Kaanapali resort area with potential sewage spills in the Lahaina area.

FY2006 Scope: Review the existing plans, determine the optimal route and design replacement facilities.

FY2008 Scope: Construct new force mains.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design	250 C							250 C
Construction			1,750 X					1,750 X
Other								
Total Cost	250	0	1,750	0	0	0	0	2,000
Funding Source	250 C							250 C
			1,750 X					1,750 X

#### **Lahaina WWPS #1 Replacement**

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Part of a phased replacement of canned pump stations. Existing station reaches maximum hydraulic capacity during high rain events. It cannot be upgraded to handle the projected increase in flows from new development or peak wet weather flows. The impact of not

renovating this pump station could be a moratorium on development and possible sewage spills in the Lahaina area.

FY2006 Scope: Review the existing plans, revise as necessary and perform the preliminary work at existing pump station to allow for

construction of the new pump station.

FY2007 Scope: Construct new cast-in-place concrete facility with capacity required for future planned development. Construction to include

new pumps, motors, motor controls, emergency generator, odor control, dry well and wet well. Design was 100% complete in 1995,

however, updating of plans and revisions are required.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design	100 C	350 C						450
Construction		7,050 X						7,050
Other								
Total Cost	100	7,400	0	0	0	0	0	7,500
Funding Source	100 C	350 C						450
		7,050 X						7,050

#### **Lahaina WWPS #2 Modifications**

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification This is a portion of phased replacement of older canned type pump stations. The age of the pump station makes the acquisition of critical spare parts difficult. These modifications will accommodate the increased growth in West Maui and create a more reliable system. Safety and access are other major considerations. The pump station will either be downsized if Lahaina WWPS #3 force main extension is constructed or be renovated to handle Lahaina WWPS #3 flows. Downsizing in conjunction with Lahaina WWPS #3 force main extension will save approximately \$1-2M. (Note: The applicability of this project is dependent on the outcome of the Lahaina WWPS #3 Force Main Ext. / Lahaina WWPS #2 Modifications project in FY2010)

FY2011 Scope: Construction of facilities will include the replacement of existing pumps, piping, electrical controls, generator and MCC; Construction of new drywell for improved equipment access; upgrade or resizing of all equipment as dictated by new station loading.

**Operating Impact** No impact on staffing or operating budget anticipated.

		DOLLARS IN THOUSANDS							
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL	
Land Acquisition								0	
Design								0	
Construction						1,800 X		1,800 X	
Other									
Total Cost	0	0	0	0	0	1,800	0	1,800	
Funding Source			-			1,800 X		1,800 X	

#### Lahaina WWPS #3 Force Main Extension

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Lahaina WWPS #3 has been designed for a future discharge to the Housing Finance & Development Corporation (HFDC) project gravity sewer. With the installation of a force main extension, Lahaina WWPS #3 can bypass Lahaina WWPS #2. This extension would reduce capital expenditure to renovate WWPS #2, reduce chemical usage for odor control, and provide more efficient pumping. Estimated cost savings from reduced WWPS #2 upgrade is approximately \$2-3 M. (Note: The applicability of this project is dependent on the outcome of the

Lahaina WWPS #3 Force Main Ext. / Lahaina WWPS #2 Modifications project in FY 2010.).

FY2011 Scope: Construct a 20 inch diameter force main extension to facilitate bypassing of Lahaina WWPS #2.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition	<u> </u>				<u></u>		<u></u>	0
Design								0
Construction						1,200 X		1,200 X
Other								
Total Cost	0	0	0	0	0	1,200	0	1,200
Funding Source						1,200 X		1,200 X

#### Lahaina WWPS #3 Force Main Extensions and Lahaina WWPS#2 Modification

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Existing Lahaina WWPS #2 is nearing the end of its useful life. It will no longer be capable of handling flows from identified existing or proposed developments. A bypass of some flow, either via Housing Finance & Development Corporation (HFDC) gravity line or a force main

extension from Lahaina WWPS #3, is required to maintain pumping capacity and allow continued growth in the area.

FY2010 Scope: Consulting design services for alternative evaluation for force main extension, location, construction techniques, and

construction documents.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS	IN THOUSANDS_			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design					650 B			650 B
Construction								0
Other								
Total Cost	0	0	0	0	650	0	0	650
Funding Source					650 B			650 B

## Lahaina WWRF Modifications, Stage IA

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Provide engineering consultant services to design long term operational process changes to the 1975 and 1985 facilities as well as provide completed bid documents. The current process operations of the facility cannot meet the reserve allocations for Kapalua, HFDC and AMFAC properties and other projects. Major modifications and upgrades need to be completed in order to have the reserve capacity available for these entities as well as other projects throughout the west side. By not completing this project, we expect continued problems with processing units especially during major maintenance activities and will not have the capacity to accommodate development in the region.

FY2007 Scope: Complete the preparation of construction plans and bid documents (ongoing from 2006).

FY2008 Scope: Construction of the balance modifications to increase capacity to 9.0 m.g.d..

**Operating Impact** Anticipated increases in manpower and electrical costs as flow to plant is increased.

	DOLLARS IN THOUSANDS								
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL	
Land Acquisition								0	
Design	1,000 B	2,500 B						3,500	
Construction			20,000 X					20,000	
Other									
Total Cost	1,000	2,500	20,000	0	0	0	0	23,500	
Funding Source	1,000 B	2,500 B						3,500	
			20,000 X					20,000	

#### Wahikuli Gravity Sewer

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Expansion of the wastewater treatment collection system to service the Wahikuli Subdivision to reduce the usage of septic and cesspool disposal systems. The existing Wahikuli Subdivision of approximately 200 lots north of Fleming Road is currently on individual wastewater systems. There is an 18" gravity line that is located within the Honoapiilani Highway directly fronting this subdivision. A study for the West Maui Watershed Committee has indicated that the wastewater from the individual systems may be contributing to nutrient loadings to the nearby shore waters.

FY2008 Scope: Develop a preliminary engineering report to determine the alternatives, including individual pump stations, and estimated cost to connect this subdivision to the County system.

FY2009 Scope: Prepare construction plans and bid documents based on study findings.

FY2011 Scope: Construct new subdivision collection transmission system to connect to the existing County collection system.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS IN	N THOUSANDS_			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>
Land Acquisition								0
Design				50 C	300 C			350 C
Construction							4,000 B	4,000 E
Other								
Total Cost	0	0	0	50	300	0	4,000	4,350
Funding Source				50 C	300 C			350 (
							4,000 B	4,000 E

#### **West Maui Reuse System Storage and Transmission**

**District** West Maui

**Department** Public Works and Environmental Management – Wastewater

Project Type Sewer

Description and Justification Construct a one million gallon offsite reuse storage reservoir and associated infrastructure. Effluent reuse in West Maui has the potential to expand to numerous resorts and commercial centers within the Kaanapali area. However, in order to reliably service these additional users, an additional offsite reservoir will need to be constructed. This reservoir will allow for additional storage and pressurization of the system. An offsite storage reservoir will also provide the County with a more reliable system and one that is more flexible than the existing direct

pumping scheme.

FY2008 Scope: Acquire the land and prepare construction plans and bid documents for an offsite reuse storage reservoir and associated

infrastructure.

FY2010 Scope: Construction of facilities.

**Operating Impact** \$500,000 for additional positions and electrical usage.

	DOLLARS IN THOUSANDS									
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>		
Land Acquisition			200 C					200 C		
Design			1,000 C					1,000 C		
Construction					24,000 X			24,000 X		
Other										
Total Cost	0	0	1,200	0	24,000	0	0	25,200		
Funding Source			1,200 C					1,200 C		
					24,000 X			24,000 X		

#### **Lahaina WTP Improvements - PVDF Retrofit**

**District** West Maui

**Department** Water Supply

Project Type Water Supply

**Description and** Install PVDF membranes for microfiltration units which can be cleaned with chlorine. Chlorine-tolerant membranes will decrease chemical

**Justification** use and costs of cleaning operations, improve efficiency of operations, and reduce labor costs.

**Operating Impact** No impact on staffing or operating budget anticipated.

	DOLLARS IN THOUSANDS								
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	<u>TOTAL</u>	
Land Acquisition								0	
Design								0	
Construction		100 U						100 U	
Other									
Total Cost	0	100	0	0	0	0	0	100	
Funding Source		100 U						100 U	

#### **Mahinahina WTP Improvements**

**District** West Maui

**Department** Water Supply

Project Type Water Supply

**Description and** Install microfiltration units to better meet Surface Water Treatment requirements. Treatment plant is currently a conventional filtration plant.

**Operating Impact** No impact on staffing or operating budget anticipated.

Anticipated Life 20 years

**Justification** 

	DOLLARS IN THOUSANDS									
Expenditure Type	Prior Appropriation	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL		
Land Acquisition		50 R						50 R		
Design		660 R						660 R		
Construction			10,000 X					10,000 X		
Other										
Total Cost	0	710	10,000	0	0	0	0	10,710		
Funding Source		710 R						710 R		
			10,000 X					10,000 X		

## **Treatment for Honokahua Well A Design**

**District** West Maui

**Department** Water Supply

Project Type Water Supply

**Description and** Install Granular Activated Carbon (GAC) treatment for Honokahua Well A to remove Dibromochloropropane (DBCP). Improve quality of

**Justification** water from this well to enable it to serve as additional supply and/or backup for the Lahaina system area.

**Operating Impact** No impact on staffing or operating budget anticipated.

				DOLLARS II	N THOUSANDS			
Expenditure Type	Prior <u>Appropriation</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL
Land Acquisition								0
Design		250 R						250 R
Construction				2,000 R				2,000 R
Other								
Total Cost	0	250	0	2,000	0	0	0	2,250
Funding Source		250 R		2,000 R				2,250 R